



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,253	06/09/2005	Tetsuyuki Narabayashi	1217-051428	1862

28289 7590 05/28/2008
THE WEBB LAW FIRM, P.C.
700 KOPPERS BUILDING
436 SEVENTH AVENUE
PITTSBURGH, PA 15219

EXAMINER

DONDERO, WILLIAM E

ART UNIT

PAPER NUMBER

3654

MAIL DATE

DELIVERY MODE

05/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,253

Applicant(s)

NARABAYASHI, TETSUYUKI

Examiner

WILLIAM E. DONDERO

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 7-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,4 and 7-10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 22 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 18, 2008 has been entered.

Claim Objections

Claims 7-8 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitations of Claims 7-8 are the limitations added to Claims 4 and 1, respectively, and therefore are redundant which does not further limit the parent claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (Specification page 2, line 18 – page 5, line 7;

Figures 3-4) in view of Breacker et al. (US-3421709) and Gayoso (US-6823920).

Regarding Claims 1 and 8, Applicant's Admitted Prior Art discloses a spacer take-up device in an apparatus for processing a film carrier tape 100 for mounting an electronic component comprising a feeding device 106 for feeding the film carrier tape for mounting an electronic component which is wound up a reel 104 through a spacer 102 to a predetermined apparatus 101 for processing the film carrier tape for mounting the electronic component; and a spacer take-up device 108 for winding the spacer fed out of the feeding device upon a reel 110, and a take-up driving shaft (shown but not numbered) of the spacer take-up device is coupled to a second motor 118 (Specification: page 2, line 18 – page 5, line 7; Figures 3-4). Applicant's Admitted Prior Art is silent about a feed driving shaft of the reel of the feeding device being coupled to a first driving motor, a clutch always set in a slip state, which always rotates the take-up driving shaft at a higher speed than a predetermined speed and the tension to be applied to the spacer is thus set within a predetermined tension, for coupling the take-up driving shaft and the second driving motor, and an amount of take-up of the spacer take-up device is set to be greater than that of the feeding device, thereby taking up the spacer at a constant tension. However, Breacker et al. disclose a clutch 47 always set in a slip state, which always rotates a take-up driving shaft 17 at a higher speed than a predetermined speed and the tension to be applied to the material being wound is thus set within a predetermined tension, to couple the driving mechanism with a take-up device 10,16 and an amount of take-up of a web material being set to be greater than that of a feeding

device, thereby taking up the web at a constant tension (Figures 1-3; Column 3, Lines 16-48). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the clutch of Breacker et al. between the motor and take-up driving shaft of Applicant's Admitted Prior Art to reduce the slack at the take-up device by taking up the spacer with a constant tension as taught by Breacker et al. (Column 3, Lines 25-31). Further, Gayoso discloses driving a feeding and winding apparatus with one motor or multiple independent motors (Figures 1-9; Column 4, Lines 39-53). It would have further obvious to one of ordinary skill in the art at the time of the invention to control the feeding and take-up devices with independent first and second motors as taught by Gayoso to simplify the control system and make it more precise.

With respect to claim 9, Applicant's Admitted Prior Art (Specification page 2, line 18 – page 5, line 7; Figures 3-4) in view of Breacker (US-3421709) and Gayoso (US-6823920) does not disclose specific values for the tension applied by the clutch. However, one of ordinary skill in the art is expected to routinely experiment with the parameters, especially when the specifics are not disclosed, so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been obvious through routine experimentation and optimization, for one of ordinary skill in the art to make the tension applied by the clutch 50 to 5000 g_f to achieve the proper tension without any slack at the take-up device.

Regarding Claims 4, 7, and 10, the method described in these claims would inherently result from the use of the spacer take-up device of Applicant's Admitted Prior

Art Unit: 3654

Art (Specification page 2, line 18 – page 5, line 7; Figures 3-4) in view of Ito (US-5755522) and Gayoso (US-6823920).

Response to Arguments

With respect to Applicant's arguments starting on page 5, line 14 to page 5, line 21, Applicant argues the finality of the previous Office Action should be withdrawn due to the Amendment of June 20, 2007 only including minor clarifications and subject matter previously set forth in previously present Claim 2. Applicant's arguments with respect to the finality of the previous Office Action have been considered but are moot in view of the filing of the Request for Continued Examination on February 18, 2008.

With respect to Applicant's arguments starting on page 5, line 7 to page 7, line 22, Applicant argues Ito does not disclose or suggest a spacer or that the tension applied to the spacer is set within a predetermined region, because the recording paper of Ito is not reused and thus not equivalent to the spacer. It is noted that Ito does not need to disclose a spacer, as Applicant's Admitted Prior Art already discloses a spacer. Furthermore, Ito, as well as Breacker et al. are merely used for teaching a slip clutch always in a slip state for controlling the tension for a winder winding elongate material of any kind, which teaching can be combined with any winding device including the spacer winding device of Applicant's Admitted Prior Art. Applicant's arguments with respect to claims 1 and 4 have been considered but are moot in view of the new ground(s) of rejection.

With respect to Applicant's arguments starting on page 7, line 23 to page 7, line 34, Applicant argues Gayoso does not disclose or suggest a spacer or that the tension

Art Unit: 3654

applied to the spacer is set within a predetermined region, because the recording paper of Ito is not reused and thus not equivalent to the spacer. It is noted that Ito does not need to disclose a spacer, as Applicant's Admitted Prior Art already discloses a spacer. Furthermore, Ito, as well as Breacker et al. are merely used for teaching a slip clutch always in a slip state for controlling the tension for a winder winding elongate material of any kind, which teaching can be combined with any winding device including the spacer winding device of Applicant's Admitted Prior Art. Applicant's arguments with respect to claims 1 and 4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM E. DONDERO whose telephone number is (571)272-5590. The examiner can normally be reached on Monday through Friday 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. E. D./
Examiner, Art Unit 3654

/Peter M. Cuomo/
Supervisory Patent Examiner, Art Unit 3654